Operations Report

Andy Hocker

10-JUL-2003

CDF Weekly Meeting

Store summary

Date	Inst Lum (initial)	Int Lum (live)	ε	Comments
Mo 7/7	32.6e30	702.3	73.6%	Human error, TDC problem
Tu 7/8	33.6e30	1259.7	87.6%	CAEN crate failures in plug, Si
We 7/9	35.3e30	1321.1	89.1%	Clock glitch, 2 Si CAEN crate failures

Few stores as accelerator complex had a truly astounding number of problems over the weekend

A. Hocker, CDF Weekly Meeting

CDF's down time

- "Human error"
  - Housecleaning: old versions of Java were deleted, but EVB cleanup script had old version secretly hardwired in
  - Resolution: EVB will use "current default" from now on
- Global TDC done timeouts
  - Usually recoverable by "shepherding," but not this time
  - Expert tried several TDC reseats, but in the end TDC had to be swapped out
- Plug HV
  - Trip that could only be recovered by power-cycling CAEN crate (3rd in "list of things to try")
- Clock Glitch
  - Lightning strike likely culprit
  - Actually the quickest recovery from a clock problem I've ever seen (20 mins)
  - Switching from cable TV to optical link will robustify the clock

CDF down time, cont.

- **Si CAEN crate communication failures**
  - Distributed across all 16 crates
  - Not correlated with any losses (SEUs)
  - Come in weird periodic waves

- **COT HV trips**
  - Two in SL3 quad C this week – lowered by 40V in hopes of surviving 'til shutdown

A. Hocker, CDF Weekly Meeting
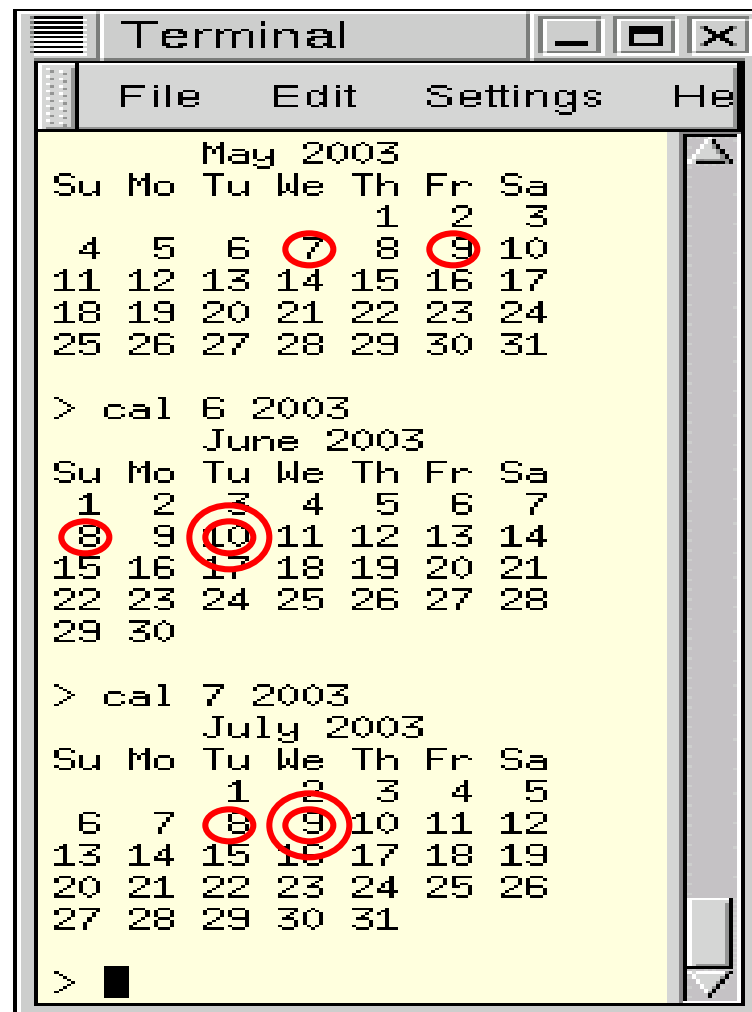
Activities/Plans

- Majority of data taken this week has included compressed COT/Si data (as a copy)
  - Trying to find any low-rate bugs
- Two accesses used (not requested)
  - Two silicon ladders fixed
- L2 composite triggers tested
- End-of-store-tests that have been requested
  - "Bring tha noise" on silicon --- simulate what life would be like with no SVX upgrade and several inverse femtobarns
  - Diffractive trigger test
  - Test scheme where SVT only acts when the appropriate L1 bit has fired
  - High rate EVB test
  - XFT test???
  - New TDC code test

A. Hocker, CDF Weekly Meeting